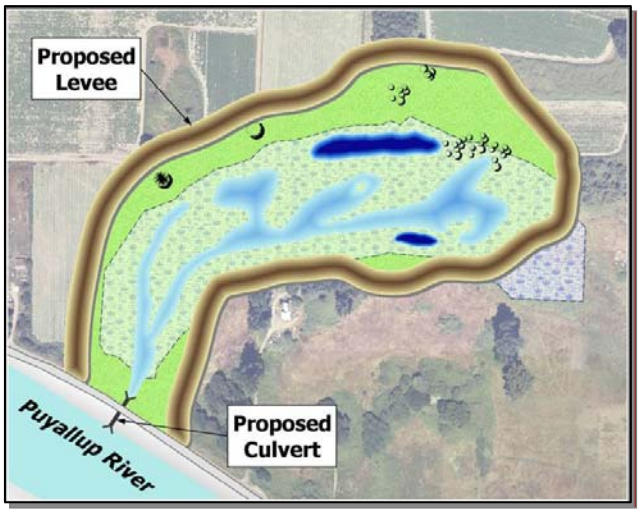
RIDOLFI Inc.

Off-Channel Habitat Restoration, Sha Dadx Site, Puyallup Reservation

The Sha Dadx site is adjacent to the Puyallup River on Puyallup Tribal Trust lands. The site contains a former channel of the Puyallup River that was stranded and isolated when the river was straightened and diked in the early 1900s. As a result of diking on the lower Puyallup River, habitat complexity is severely reduced, which is a limiting factor for several species of salmonids. In particular, refugia and feeding opportunities for juvenile salmonids are greatly impaired.

The Puyallup Tribe, as one of the Commencement Bay Natural Resource Trustees, recognized the restoration opportunities at the Sha Dadx site and offered the land to the Trustees for restoration purposes. Working under contract to NOAA, Ridolfi planned, permitted, and designed the 15 acre restoration project. One of the challenges was how to establish a connection between the Puyallup River and off-channel areas while maintaining the flood control capacity currently provided by the levee system. In collaboration with Pierce County hydraulic engineers, Ridolfi selected an alternative with a setback levee, which will be constructed to equivalent standards as the existing levee.

Installing a staff gage to measure surface water levels.



Preliminary design for a setback levee at the Sha Dadx site.

Ridolfi's responsibilities for the Sha Dadx project were to prepare a biological assessment report, an environmental assessment report, and a JARPA application for submission to regulatory agencies. To these ends, Ridolfi installed piezometers and staff gages in the wetlands and a transducer in the Puyallup River to characterize soil and hydrological conditions and is preparing plans and specifications for the project. In addition, Ridolfi managed a team of subconsultants responsible for performing topographic and wetland surveys, geotechnical evaluations, and structural engineering design.